

t27\_projpl\_1  
(TMQaNeArLG261pXxfHt6mohnFjtjsEX6TXi)

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Let  $v6\_incsp\_1 : \iota \Rightarrow o$  be given. Let  $v1\_incproj : \iota \Rightarrow o$  be given. Let  $v2\_incproj : \iota \Rightarrow o$  be given. Let  $v3\_incproj : \iota \Rightarrow o$  be given. Let  $v4\_incproj : \iota \Rightarrow o$  be given. Let  $l1\_incsp\_1 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $u1\_incsp\_1 : \iota \Rightarrow \iota$  be given. Let  $r5\_projpl\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $r2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $r4\_projpl\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $r1\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} & \forall X0.((v6\_incsp\_1 X0) \wedge ((v1\_incproj X0) \wedge ((v2\_incproj X0) \wedge \\ & ((v3\_incproj X0) \wedge ((v4\_incproj X0) \wedge (l1\_incsp\_1 X0)))))) \Rightarrow (\forall X1. \\ & (m1\_subset\_1 X1 (u1\_incsp\_1 X0)) \Rightarrow (\forall X2.(m1\_subset\_1 X2 \\ & (u1\_incsp\_1 X0)) \Rightarrow (\forall X3.(m1\_subset\_1 X3 (u1\_incsp\_1 X0)) \Rightarrow \\ & ((\neg r4\_projpl\_1 X0 X1 X2 X3) \Rightarrow (r1\_zfmisc\_1 X1 X2 X3)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. (r2\_zfmisc\_1 X0 X1 \\ & X2 X3) \Leftrightarrow ((X0 \neq X1) \wedge ((X0 \neq X2) \wedge ((X0 \neq X3) \wedge ((X1 \neq X2) \wedge ((X1 \neq X3) \wedge (X2 \neq \\ & X3)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. (l1\_incsp\_1 X0) \Rightarrow (\forall X1. (m1\_subset\_1 X1 (u1\_incsp\_1 \\ & X0)) \Rightarrow (\forall X2. (m1\_subset\_1 X2 (u1\_incsp\_1 X0)) \Rightarrow (\forall X3. \\ & (m1\_subset\_1 X3 (u1\_incsp\_1 X0)) \Rightarrow (\forall X4. (m1\_subset\_1 X4 \\ & (u1\_incsp\_1 X0)) \Rightarrow ((r5\_projpl\_1 X0 X1 X2 X3 X4) \Leftrightarrow ((\neg r4\_projpl\_1 \\ & X0 X1 X2 X3) \wedge ((\neg r4\_projpl\_1 X0 X2 X3 X4) \wedge ((\neg r4\_projpl\_1 X0 X3 X4 X1) \wedge \\ & (\neg r4\_projpl\_1 X0 X4 X1 X2)))))))))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. (r1\_zfmisc\_1 X0 X1 X2) \Leftrightarrow ((X0 \neq \\ & X1) \wedge ((X0 \neq X2) \wedge (X1 \neq X2))) \end{aligned} \quad (4)$$

**Theorem 1**

$$\begin{aligned} & \forall X0.((v6\_incsp\_1 X0) \wedge ((v1\_incproj X0) \wedge ((v2\_incproj X0) \wedge \\ & ((v3\_incproj X0) \wedge ((v4\_incproj X0) \wedge (l1\_incsp\_1 X0)))))) \Rightarrow (\forall X1. \\ & (m1\_subset\_1 X1 (u1\_incsp\_1 X0)) \Rightarrow (\forall X2.(m1\_subset\_1 X2 \\ & (u1\_incsp\_1 X0)) \Rightarrow (\forall X3.(m1\_subset\_1 X3 (u1\_incsp\_1 X0)) \Rightarrow \\ & (\forall X4.(m1\_subset\_1 X4 (u1\_incsp\_1 X0)) \Rightarrow ((r5\_projpl\_1 X0 \\ & X1 X2 X3 X4) \Rightarrow (r2\_zfmisc\_1 X1 X2 X3 X4)))))) \end{aligned}$$